

REMARKS

The Applicants hereby acknowledge with appreciation the Examiner's determination that Claims 1 and 10 are allowable.

The Applicants respectfully notify the Examiner that the Examiner has erroneously omitted pending dependent claims 2-9 and 11-18 from the Application. These claims have not been canceled. The correct listing of pending claims includes claims 1-18 and claims 21-38. This is supported by the papers of record. Claims 19 and 20 have been canceled. The final rejection dated October 3, 2005 mistakenly listed only claims 1, 10 and 21-38 as currently pending in the application. As a result, there is no indication on the record of the status of such claims 2-9 and 11-18. Applicants hereby respectfully request that the Examiner re-open prosecution of the present application and provide a new office action considering the pending claims in their entirety.

As a result of this omission, it is unknown to Applicants whether dependent claims 2-9 and 11-18 are considered to be patentable or if they stand rejected. Accordingly, said claims will not be addressed in the following remarks.

The Examiner has rejected claims 21-38 under 35 U.S.C. 103 over LeClair et al. (U.S. patent 4,372,777, in view of Arnold (U.S. patent 5,612,285), Japanese Patent JP 63303903 (JP '903), and further in view of Van Haften et al. (U.S. patent 5,221,319) or Sato et al. (U.S. patent 6,083,875). It is respectfully submitted that the rejection has been overcome by the instant amendment. Claims 21 and 30 have been amended to clarify that the water dispersible agricultural solids suspensions of the invention are water-soluble and comprise water-soluble agricultural solids. Such water-soluble, water dispersible agricultural solids suspensions are neither taught nor suggested by the above combinations of references.

The present invention relates to agricultural compositions. Particularly, the invention of claim 21 provides a water-soluble, stable agricultural solids suspension readily dispersible in water. The suspension comprises a) water-soluble agricultural solids consisting of at least one member selected from the group consisting of a fertilizer, an adjuvant, a herbicide and a pesticide, said agricultural solids having particles more than about 99 wt.% passable through a Tyler #48 sieve; b) a single non-ionic surfactant selected from the group consisting of alkyl-phenoxy-poly(ethylenoxide)alkanols, ethoxylated aliphatic C₁₁ to C₁₅ alcohols, ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids; c) a water-soluble glycol liquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol; and d) at least one member selected from the group consisting of ammonium sulfate ((NH₄)₂SO₄), diammonium phosphate ((NH₄)₂HPO₄) and the isopropylamine salt of N-(phosphonomethyl) glycine. In the embodiment of claim 30, the suspension comprises an ammonium sulfate adjuvant. Such suspensions exhibit superior stability and pour properties.

LeClair et al. teaches a solid herbicide composition in suspension form, which comprises from 25-50% of an herbicide, 0-15% of a triazine, and an emulsion/suspension system. The emulsion/suspension system of LeClair et al. comprises multiple components, including a hydrated aluminum silicate component, such as kaolin. The Examiner is correct that LeClair et al. teaches components (a) and (b) of the invention, namely (a) an herbicide; and (b) EO/PO or an alkyl phenoxy polyoxyethylene ethanol. However, as the Examiner acknowledges, LeClair et al. fails to teach an herbicide composition comprising a glyphosate, diammonium phosphate or ammonium sulfate. Furthermore, the presence of a water-insoluble hydrated aluminum silicate component, e.g. kaolin, renders the suspension system of LeClair et al. water insoluble.

The Examiner urges that it would be obvious for one skilled in the art to formulate the present invention upon a combined reading of LeClair et al. with Arnold and JP '903. Arnold teaches solid granular glyphosate herbicide formulations that include high molecular weight polyethylene glycol as an extrusion aid. However, Arnold does not

teach or suggest the formation or presence of stable suspension. Furthermore, Arnold fails to teach the presence of a water soluble glycol liquid such as ethylene glycol or propylene glycol, as taught by the present invention. Rather, Arnold teaches the presence of high molecular weight polyethylene glycol which is in the form of a wax. Particularly, at col. 4, lines 37-46, Arnold teaches the use of a polyethylene glycol having an average molecular weight above about 1000 and most preferably from 7000 to 9000. Polyethylene is commonly known in the art to be a solid at these high molecular weights. Polyethylene glycol is only a liquid at molecular weights well below 1000.

JP '903 also teaches a solid herbicide which may be in the form of a liquid flowable solid, and which may include ammonium sulfate. However, the herbicide composition of JP '903 is different than the claimed invention. Particularly, JP '903 fails to teach a water-soluble, stable suspensions including a single non-ionic surfactant selected from the group consisting of alkyl-phenoxy-poly(ethylenoxide)alkanols, ethoxylated aliphatic C₁₁ to C₁₅ alcohols, ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids, together with a water-soluble glycol liquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol.

The Examiner further applies U.S. patent Van Haften et al. (U.S. patent 5,221,319) or Sato et al. (U.S. patent 6,083,875) for their disclosure of solid herbicide compositions comprising diammonium phosphate. Van Haften et al. provides dry, water-soluble herbicides that are not suspensions in a glycol, as is required by the presently claimed invention. Sato et al. provides solid glyphosate formulations which are dissolved in multiple surfactants and which, like Van Haften et al., are also not suspensions in a glycol as the invention requires.

The Examiner has combined each of the references in rejecting the claims under 35 U.S.C. 103, asserting that it would have been obvious for one skilled in the art to combine these references to produce the presently claimed invention. Applicants submit that this is incorrect. Importantly, the teachings of Arnold are in direct conflict with the teachings of LeClair et al. Particularly, Arnold describes solid glyphosate herbicide

formulations which are necessarily water-soluble. LeClair et al. teaches non-water soluble herbicide compositions that contain water-insoluble hydrated aluminum silicate component, e.g. kaolin. The Arnold reference discusses specifically the undesirability of herbicide compositions that are not fully water soluble, particularly compositions like LeClair et al. which include silica (see col. 2, lines 9-17 of Arnold). Accordingly, due to the fact that Arnold teaches away from the disclosure of LeClair et al., it is respectfully submitted that one skilled in the art would not look to combine the teachings of LeClair et al. and Arnold to arrive at the presently claimed invention. More particularly, one skilled in the art simply would not look to LeClair et al. and Arnold together with JP '903, Van Haften et al. or Sato et al. to arrive at the presently claimed invention.

Arnold et al. further teaches away from the formation of liquid compositions in favor of dry formulations. Particularly, Arnold discusses at col. 2, lines 45-55 that dry glyphosate formulations have certain desired advantages over liquid products. Accordingly, it is respectfully submitted that one skilled in the art would not selectively choose a liquid flowable solid from JP '903 to combine with the incompatible disclosure of Arnold and the incompatible disclosure of LeClair et al. For the above reasons, it is respectfully urged that each of the applied references fails to provide the requisite motivation to support the Examiner's combination of references.

It is respectfully submitted that the proposed combination of the LeClair et al., Arnold and JP '903 references, in addition to Van Haften et al and Sato et al., would change the principle of operation of the prior art invention being modified. If a proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). Accordingly, it is further submitted that where no teaching or suggestion to combine the references exists, Applicants are not required to provide evidence of unexpected results to prove that one skilled in the art would not be motivated to combine the applied references.

Applicants submit that the Examiner is looking beyond the teachings of the reference. A reference has to offer sufficient motivation for one skilled in the art to achieve the desired result. In the instant case, the motives in the references, as disclosed by the practices therein, are quite different from those in the instant invention. "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination." In re Geiger, 2 U.S.P.Q.2d 1276, 1278 (CAFC 1987). The Examiner is of the view that it would be obvious to formulate the instant suspension because all of the components are known *individually* for use in a herbicidal composition. It is submitted that this position is incorrect because there is no suggestion of the compatibility of these individual components together. There is simply nothing in the cited references to suggest to someone skilled in the art that these teachings should be combined in order to achieve this result, regardless of the fact that all prior art compositions are individually taught to function as herbicidal compositions.

It is further respectfully submitted that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Likewise, the belief that one skilled in the art could form the claimed multilayered film does not suggest that one should form such a film to obtain the disclosed benefits.

It is submitted that the examiner is reconstructing the art in light of Applicant's disclosure. Obviousness cannot be determined solely after reading Applicants' teaching. Citing references that merely indicate that isolated parts recited in the claims are known is not a sufficient basis for a conclusion of obviousness; there must be something that suggests the desirability of combining the references in a manner calculated to arrive at the claimed invention. Ex parte Hiyamizu, 10 U.S.P.Q.2d 1393, 1394 (PTO Bd. Pat. Ap. and Int., 1988).

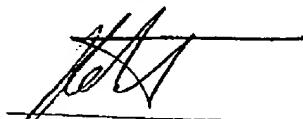
Where claimed subject matter has been rejected as obvious in view of prior art references, a proper analysis under 35 U.S.C. 103 also requires consideration of whether the prior art would also have revealed that in so making or carrying out the claimed invention, those of ordinary skill would have a reasonable expectation of success. See In Re Dow Chemical Company 837 Fed. 2d 469, 473, 5 USPQ 2d 1529, 1531 (Fed. Cir. 1988). Applicants respectfully assert that such a suggestion and/or reasonable expectation of success could not be found in the cited references.

The Examiner also states that it would have been obvious for one skilled in the art to use ingredients having the same particle sizes and amounts as those taught by the present invention. Applicants respectfully disagree. It is submitted that, when working with suspensions, the interaction between a particular liquid, particle, and surfactant is very difficult, and often impossible, to predict. Applicants respectfully submit that the Examiner is using an impermissible "obvious to try" standard of patentability. The fact that one skilled in the art *could* use such ingredients does not show that one skilled in the art would have any motivation *per se* which would lead them to formulate the present invention upon a reading of the cited references. It is therefore respectfully requested that the 35 U.S.C. 103 rejection be withdrawn.

The undersigned respectfully requests re-examination of this application and believes it is now in condition for allowance. Such action is requested. If the Examiner believes there

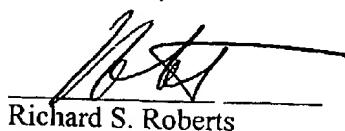
is any matter which prevents allowance of the present application, it is requested that the undersigned be contacted to arrange for an interview which may expedite prosecution.

Respectfully submitted,



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I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office (FAX No. 571-273-8300) on December 29, 2005.



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